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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

THOMPSON, JAMES A

ART UNIT	PAPER NUMBER
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2625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

08/579,733

Applicant(s)

NOBUTA ET AL.

Examiner

James A. Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24, 27, 58, 59, 64 and 66-75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 06 November 2006 have been fully considered but they are not persuasive. *Applicant argues* that there is no motivation for the recited limitation "without requiring any additional designation by the user other than the copying designation". *Examiner replies* that Matsumoto (US Patent 5,684,607) provides both the teaching which teaches the limitation "without requiring any additional designation by the user other than the copying designation" and provides the motivation for combining said teaching with the teachings of Kita (US Patent 5,021,892) and Kawamata (US Patent 4,989,163) [see page 6, line 20 to page 7, line 7 of the previous office action, mailed 04 August 2006].

The present amendments to the claims and the newly added claims have been fully considered by Examiner and are addressed in the prior art rejections set forth below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 24, 27, 59 and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kita (US Patent 5,021,892) in view of Kawamata (US Patent 4,989,163) and Matsumoto (US Patent 5,684,607).

Regarding claim 24: Kita discloses a printing apparatus (figure 3(1) of Kita) comprising:

- a scanner (figure 3(60) of Kita) for reading an image of a document (column 5, lines 16-30 of Kita) and outputting an image signal (column 5, lines 31-47 of Kita).
- a control unit (figure 3(50,51,52,54,56,DB,AB,CB) of Kita – main CPU) adapted for controlling said printing apparatus (column 4, lines 46-54 of Kita) and performing image processing on the image signal output from said scanner to provide a first processed image signal, the image processing being processing that is necessary for copying (column 5, lines 33-42 of Kita).

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- a first bidirectional general-purpose interface (figure 3 (5) and column 6, lines 20-28 of Kita) adapted for transmitting, under control of said control unit, the image signal output by said scanner to an external computer (figure 3(8) and column 5, lines 65-67 of Kita), which performs image processing on the transmitted image signal to provide a second processed image signal (column 3, lines 46-48 of Kita), and for receiving the second processed image signal from the external computer (column 5, lines 65-68 of Kita – signal must be received from computer to be recorded by printer), the image processing performed by the external computer being processing that is necessary for copying (column 5, lines 65-68 of Kita – would be unable to print if processing necessary for copying was not performed).
- a second bidirectional general-purpose interface (figure 3(66) of Kita) adapted for outputting the first processed image signal (column 4, lines 3-17 of Kita) and the second processed image signal (column 5, lines 67-68 of Kita) to a printing unit (as can clearly be seen in figure 3 of Kita, element 66 is the interface leading to the printing unit).
- said printing apparatus has a plurality of modes including a read mode (column 6, line 68 to column 7, line 4 of Kita), a print mode (column 7, lines 5-7 of Kita), a first copying mode (column 6, lines 50-55 of Kita), and a second copying mode (column 6, lines 56-67 of Kita).
- in the read mode for performing read operations in response to a read designation by the user (column 10, line 66 to column 11, line 5 of Kita) inputted via the external computer (figure 3 and column 4, lines 45-66 of Kita), the image signal from said scanner is transmitted to the external computer via said first bidirectional general-purpose interface (column 6, line 68 to column 7, line 5 of Kita).
- in the print mode for performing print operation in response to a print designation by a user (column 11, lines 20-22 and lines 36-40 of Kita) inputted via the external computer (figure 3 and column 4, lines 45-66 of Kita), the image signal from the external computer is transmitted to the printing unit via said first bidirectional general-purpose interface and said second bidirectional general-purpose interface (column 11, lines 36-40 of Kita).
- in the first copying mode for performing first copying operation based on the second processed image signal in response to a copying designation by the user (column 6, lines 50-55 of Kita and column 19, lines 63-67 of Kita) inputted via the external computer (figure 3 and column 4, lines 45-66 of Kita), the image signal from said scanner is transmitted to the external computer where the image signal is processed into the second processed image signal via said control unit and said first bidirectional general-purpose interface (column 19, line 68 to column 20, line 11 of Kita),

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and thereafter the second processed image signal is transmitted to the printing unit via said first bidirectional general-purpose interface, said control unit, and said second bidirectional general-purpose interface (column 20, lines 12-22 of Kita).

- in the second copying mode for performing second copying operation based on the first processed image signal (column 6, lines 56-67 of Kita), the image signal from said scanner is transmitted to said control unit where the image signal is processed into the first processed image signal (column 6, lines 58-61 of Kita) and the first processed image signal is transmitted to the printing unit via said second bidirectional general-purpose interface (figure 3 and column 6, lines 56-67 of Kita).

Kita does not disclose expressly that said first and second bidirectional general-purpose interfaces are of the same standard; and that said first copying mode is completed without requiring any additional designation by the user other than the copying designation.

Kawamata discloses a print system wherein all of the interfaces are standardized (column 1, line 67 to column 2, line 4 of Kawamata).

Kita and Kawamata are combinable because they are from the same field of endeavor, namely digital image data printing and reproduction systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have modified Kita wherein the first and second bidirectional general-purpose interfaces are of the same standard, according to the teachings of Kawamata. The suggestion for doing so would have been that the overall processing speed would increase using standard interfaces since each device would operate at the fastest speed available and the input and output would be better synchronized. Therefore, it would have been obvious to combine Kawamata with Kita.

Kita in view of Kawamata does not disclose expressly that said first copying mode is completed without requiring any additional designation by the user other than the copying designation.

Matsumoto discloses printing, scanning, and other forms of image processing using a single command and without requiring any additional designation by the user other than the particular image processing designation (figure 3 and column 3, lines 49-59 of Matsumoto).

Kita in view of Kawamata is combinable with Matsumoto because they are from the same field of endeavor, namely the scanning, control and processing of digital image data in a digital image data processing, transmitting and copying environment. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to require only a single command to perform an image processing operation, as taught by Matsumoto, wherein said image processing operation is specifically the

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first copying operation taught by Kita. The motivation for doing so would have been to simplify the overall image data processing. Therefore, it would have been obvious to combine Matsumoto with Kita in view of Kawamata to obtain the invention as specified in claim 24.

Regarding claim 27: Kita discloses a method comprising the steps of:

- in the read mode for performing read operations (column 6, line 68 to column 7, line 4 of Kita) in response to a read designation by a user (column 10, line 66 to column 11, line 5 of Kita) inputted via an external computer connected to the printing apparatus (figure 3 and column 4, lines 45-66 of Kita) with a first bidirectional general-purpose interface (column 11, lines 36-40 of Kita), reading an image of a document (column 5, lines 16-30 of Kita) and outputting an image signal by means of a scanner (figure 3(60) and column 5, lines 31-47 of Kita), and transmitting the image signal output by the scanner to the external computer (figure 3(8) and column 5, lines 65-67 of Kita) via the first bidirectional general-purpose interface (figure 3(5) and column 6, lines 20-28 of Kita).
- in the print mode for performing print operation (column 7, lines 5-7 of Kita) in response to a print designation by the user (column 11, lines 20-22 and lines 36-40 of Kita) inputted via the external computer (figure 3 and column 4, lines 45-66 of Kita), receiving an image signal from the external computer via the first bidirectional general-purpose interface (column 11, lines 36-40 of Kita) and outputting the image signal to a printing unit (column 5, lines 67-68 of Kita) via a second bidirectional general-purpose interface (figure 3(66) of Kita) (as can clearly be seen in figure 3 of Kita, element 66 is the interface leading to the printer).
- in the first copying mode for performing first copying operation based on a second processed image signal in response to a copying designation by the user (column 6, lines 50-55 of Kita and column 19, lines 63-67 of Kita) inputted via the external computer (figure 3 and column 4, lines 45-66 of Kita):
 - reading an image of a document (column 5, lines 16-30 of Kita) and outputting an image signal by means of the scanner (column 5, lines 31-47 of Kita).
 - transmitting the image signal output by the scanner to the external computer via the first bidirectional general-purpose interface (column 5, lines 65-67 of Kita), wherein the external computer performs image processing on the transmitted image signal to provide the second processed image signal (column 3, lines 46-48 of Kita), the image processing being processing that is necessary for copying (column 5, lines 65-68 of Kita – would be unable to print if processing necessary for copying was not performed).

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- receiving the second processed image signal from the external computer (column 5, lines 65-68 of Kita – signal must be received from computer to be recorded by printer) via the first bidirectional general-purpose interface (figure 3(5) of Kita – as can clearly be seen in figure 3 of Kita, element 5 is the interface for receiving data from the external computer).
 - outputting the second processed image signal to the printing unit (column 5, lines 67-68 of Kita) via the second bidirectional general-purpose interface (as can clearly be seen in figure 3 of Kita, element 66 is the interface leading to the printer).
- in the second copying mode for performing second copy operation based on a first processed image data (column 6, lines 56-67 of Kita):
 - reading an image of a document (column 5, lines 16-30 of Kita) and outputting an image signal by the scanner (column 5, lines 31-47 of Kita).
 - performing image processing on the image signal output by the scanner to provide a first processed image signal (column 6, lines 58-61 of Kita), the image processing being processing that is necessary for copying (column 6, lines 62-65 of Kita).
 - outputting the first processed image signal to the printing unit via said second bidirectional general-purpose interface (figure 3 and column 6, lines 56-67 of Kita).

Kita does not disclose expressly that said first and second bidirectional general-purpose interfaces are of the same standard; and that said first copying mode is completed without requiring any additional designation by the user other than the copying designation.

Kawamata discloses a print system wherein all of the interfaces are standardized (column 1, line 67 to column 2, line 4 of Kawamata).

Kita and Kawamata are combinable because they are from the same field of endeavor, namely digital image data printing and reproduction systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have modified Kita wherein the first and second bidirectional general-purpose interfaces are of the same standard, according to the teachings of Kawamata. The suggestion for doing so would have been that the overall processing speed would increase using standard interfaces since each device would operate at the fastest speed available and the input and output would be better synchronized. Therefore, it would have been obvious to combine Kawamata with Kita.

Kita in view of Kawamata does not disclose expressly that said first copying mode is completed without requiring any additional designation by the user other than the copying designation.

Matsumoto discloses printing, scanning, and other forms of image processing using a single command and without requiring any additional designation by the user other than the particular image processing designation (figure 3 and column 3, lines 49-59 of Matsumoto).

Kita in view of Kawamata is combinable with Matsumoto because they are from the same field of endeavor, namely the scanning, control and processing of digital image data in a digital image data processing, transmitting and copying environment. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to require only a single command to perform an image processing operation, as taught by Matsumoto, wherein said image processing operation is specifically the first copying operation taught by Kita. The motivation for doing so would have been to simplify the overall image data processing. Therefore, it would have been obvious to combine Matsumoto with Kita in view of Kawamata to obtain the invention as specified in claim 27.

Regarding claim 59: Kita discloses that said control unit has a density adjusting function (column 4, lines 8-12 of Kita).

Regarding claims 68-69: Kita discloses:

- in the read mode, the image signal from said scanner is transmitted to the external computer (column 6, line 68 to column 7, line 5 of Kita) in accordance with reception of a read command (column 10, line 66 to column 11, line 5 of Kita) outputted from the external computer in response to the read designation (figure 3 and column 4, lines 45-66 of Kita).
- in the print mode, the image signal from the external computer is transmitted to the printing unit (column 11, lines 36-40 of Kita) in accordance with reception of a print command (column 11, lines 20-22 and lines 36-40 of Kita) transmitted from the external computer in response to the print designation (figure 3 and column 4, lines 45-66 of Kita).
- in the first copy mode, the image signal from the scanner is transmitted to the external computer (column 19, line 68 to column 20, line 11 of Kita) in accordance with reception of the read command (column 6, lines 50-55 of Kita and column 19, lines 63-67 of Kita) transmitted from the external computer in response to the copying designation (figure 3 and column 4, lines 45-66 of Kita), and thereafter the second processed image signal is transmitted to the printing unit in accordance with reception of the print command outputted from the external computer in response to the copying designation (column 20, lines 12-22 of Kita).

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4. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kita (US Patent 5,021,892) in view of Kawamata (US Patent 4,989,163), Matsumoto (US Patent 5,684,607), and Kenmochi (US Patent 5,900,947).

Regarding claim 58: Kita in view of Kawamata and Matsumoto does not disclose expressly that said scanner generates a color image signal.

Kenmochi discloses a scanner that generates a color image signal (column 11, lines 63-67 of Kenmochi).

Kita in view of Kawamata and Matsumoto are combinable with Kenmochi because they are from the same field of endeavor, namely the control and operation of digital image data reproduction devices and the processing of the digital image signal obtained thereon. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a scanner that generates color image signals, as taught by Kenmochi. The motivation for doing so would have been to be able to obtain full color image data from a scanned document, which is readily recognized by those of ordinary skill in the art to be a desirable capability. Therefore, it would have been obvious to combine Kenmochi with Kita in view of Kawamata and Matsumoto to obtain the invention as specified in claim 58.

5. Claims 64, 66-67 and 70-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kita (US Patent 5,021,892) in view of Matsumoto (US Patent 5,684,607).

Regarding claim 64: Kita discloses a printing apparatus (figure 3(1) of Kita) comprising:

- a scanner (figure 3(60) of Kita) for reading an image of a document (column 5, lines 16-30 of Kita) and outputting an image signal (column 5, lines 31-47 of Kita).
- a control unit (figure 3(50,51,52,54,56,DB,AB,CB) of Kita – main CPU) adapted for controlling said printing apparatus (column 4, lines 46-54 of Kita) and performing image processing on the image signal output from said scanner to provide a first processed image signal, the image processing being processing that is necessary for copying (column 5, lines 33-42 of Kita).
- a first interface (figure 3(5) and column 6, lines 20-28 of Kita) adapted for transmitting the image signal output by said scanner to an external computer (figure 3(8) and column 5, lines 65-67 of Kita), which performs image processing on the transmitted image signal to provide a second processed image signal (column 3, lines 46-48 of Kita), and for receiving the second processed image signal from the external computer (column 5, lines 65-68 of Kita – signal must be received from computer to be recorded by printer), the image processing performed by the external

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computer being processing that is necessary for copying (column 5, lines 65-68 of Kita – would be unable to print if processing necessary for copying was not performed).

- a second interface (figure 3(66) of Kita) adapted for outputting the first processed image signal (column 4, lines 3-17 of Kita) and the second processed image signal (column 5, lines 67-68 of Kita) to a printing unit (as can clearly be seen in figure 3 of Kita, element 66 is the interface leading to the printing unit).
- said printing unit has a first copying mode (column 6, lines 50-55 of Kita), and a second copying mode (column 6, lines 56-67 of Kita).
- in the first copying mode for performing first copying operation based on the second processed image signal in response to a copying designation by a user (column 6, lines 50-55 of Kita and column 19, lines 63-67 of Kita) inputted via the external computer (figure 3 and column 4, lines 45-66 of Kita), the image signal is transmitted to the external computer where the image signal is processed into the second processed image signal via said control unit and said first interface (column 19, line 68 to column 20, line 11 of Kita), then the second processed image signal is transmitted to the printing unit via said first interface, said control unit, and said second interface (column 20, lines 12-22 of Kita).
- in the second copying mode for performing second copying operation based on the first processed image signal (column 6, lines 56-67 of Kita), the image signal is transmitted to said control unit where the image signal is processed into the first processed image signal (column 6, lines 58-61 of Kita) and the first processed image signal is transmitted to the printing unit via said second interface (figure 3 and column 6, lines 56-67 of Kita).

Kita does not disclose expressly that said first copying mode is completed without requiring any additional designation by the user other than the copying designation.

Matsumoto discloses printing, scanning, and other forms of image processing using a single command and without requiring any additional designation by the user other than the particular image processing designation (figure 3 and column 3, lines 49-59 of Matsumoto).

Kita is combinable with Matsumoto because they are from the same field of endeavor, namely the scanning, control and processing of digital image data in a digital image data processing, transmitting and copying environment. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to require only a single command to perform an image processing operation, as taught by Matsumoto, wherein said image processing operation is specifically the first copying operation taught by Kita. The motivation for doing so would have been to simplify the overall image data processing. There-

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fore, it would have been obvious to combine Matsumoto with Kita to obtain the invention as specified in claim 64.

Regarding claim 66: Kita discloses that said printing apparatus has a print mode (column 7, lines 5-7 of Kita), in which print data is transmitted from the external computer to said control unit via said first interface (column 11, lines 36-40 of Kita) and the printing unit prints the print data (column 11, lines 39-40 of Kita) in response to a print designation by the user inputted via the external computer (figure 3 and column 4, lines 45-66 of Kita), and an image reading mode (column 6, line 68 to column 7, line 4 of Kita) in which an image signal from the scanner is transmitted from said control unit to the external computer via said first interface (column 6, line 68 to column 7, line 5 of Kita) in response to a read designation by the user inputted via the external computer (figure 3 and column 4, lines 45-66 of Kita).

Regarding claim 67: Kita discloses a method comprising the steps of:

- in a first copying mode (column 6, lines 50-55 of Kita) for performing first copying operation based on a second processed image signal in response to a copying designation by a user (column 6, lines 50-55 of Kita and column 19, lines 63-67 of Kita) inputted via an external computer connected to the printing apparatus with a first interface (figure 3 and column 4, lines 45-66 of Kita):
 - reading an image of a document (column 5, lines 16-30 of Kita) and outputting an image signal by a scanner (figure 3(60) and column 5, lines 31-47 of Kita).
 - transmitting the image signal output by the scanner to the external computer (figure 3(8) and column 5, lines 65-67 of Kita) via the first interface (figure 3(5) of Kita – as can clearly be seen in figure 3 of Kita; element 5 is the interface for receiving data from the external computer), wherein the external computer performs image processing on the transmitted image signal to provide a second processed image signal (column 3, lines 46-48 of Kita), the image processing being processing that is necessary for copying (column 5, lines 65-68 of Kita – would be unable to print if processing necessary for copying was not performed).
 - receiving the second processed image signal from the external computer (column 5, lines 65-68 of Kita – signal must be received from computer to be recorded by printer) via the first interface (figure 3(5) of Kita – as can clearly be seen in figure 3 of Kita, element 5 is the interface for receiving data from the external computer).

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- outputting the second processed image signal to a printing unit (figure 3(3) and column 5, lines 67-68 of Kita) via a second interface (figure 3(66) of Kita - as can clearly be seen in figure 3 of Kita, element 66 is the interface leading to the printer).
- in a second copying mode for performing second copying operation based on a first processed image data (column 6, lines 56-67 of Kita):
 - reading an image of a document (column 5, lines 16-30 of Kita) and outputting an image signal by the scanner (column 5, lines 31-47 of Kita).
 - performing image processing on the image signal output by the scanner to provide a first processed image signal (column 6, lines 58-61 of Kita), the image processing being processing that is necessary for copying (column 6, lines 62-65 of Kita).
 - outputting the first processed image signal to the printing unit via the second interface (figure 3 and column 6, lines 56-67 of Kita).

Kita does not disclose expressly that the copying operation is completed without requiring any additional designation by the user other than the copying designation.

Matsumoto discloses printing, scanning, and other forms of image processing using a single command and without requiring any additional designation by the user other than the particular image processing designation (figure 3 and column 3, lines 49-59 of Matsumoto).

Kita is combinable with Matsumoto because they are from the same field of endeavor, namely the scanning, control and processing of digital image data in a digital image data processing, transmitting and copying environment. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to require only a single command to perform an image processing operation, as taught by Matsumoto, wherein said image processing operation is specifically the copying operation taught by Kita. The motivation for doing so would have been to simplify the overall image data processing. Therefore, it would have been obvious to combine Matsumoto with Kita to obtain the invention as specified in claim 67.

Regarding claim 70: Kita discloses that, in the first copy mode, the image signal from the scanner is transmitted to the external computer (column 19, line 68 to column 20, line 11 of Kita) in accordance with reception of the read command (column 6, lines 50-55 of Kita and column 19, lines 63-67 of Kita) transmitted from the external computer in response to the copying designation (figure 3 and column 4, lines 45-66 of Kita), and thereafter the second processed image signal is transmitted to the printing unit in accordance with reception of the print command outputted from the external computer in response to the copying designation (column 20, lines 12-22 of Kita).

Regarding claim 71: Kita discloses:

- in the read mode, the image signal from said scanner is transmitted to the external computer (column 6, line 68 to column 7, line 5 of Kita) in accordance with reception of a read command (column 10, line 66 to column 11, line 5 of Kita) transmitted from the external computer in response to the read designation (figure 3 and column 4, lines 45-66 of Kita).
- in the print mode, the image signal from the external computer is transmitted to the printing unit (column 11, lines 36-40 of Kita) in accordance with reception of a print command (column 11, lines 20-22 and lines 36-40 of Kita) transmitted from the external computer in response to the print designation (figure 3 and column 4, lines 45-66 of Kita).
- in the first copy mode, the image signal from the scanner is transmitted to the external computer (column 19, line 68 to column 20, line 11 of Kita) in accordance with reception of the read command (column 6, lines 50-55 of Kita and column 19, lines 63-67 of Kita) transmitted from the external computer in response to the copying designation (figure 3 and column 4, lines 45-66 of Kita), and thereafter the second processed image signal is transmitted to the printing unit in accordance with reception of the print command transmitted from the external computer in response to the copying designation (column 20, lines 12-22 of Kita).

Regarding claim 72: Kita discloses a printing apparatus (figure 3(1) of Kita) and an information processing apparatus (figure 3(8) of Kita), wherein the information processing apparatus includes:

- a copying designation unit (figure 3(8(KYBD)) of Kita), adapted to designate a start for copying (column 3, lines 44-57 of Kita).
- a processing unit (figure 3(8(CPU)) of Kita), adapted to process an image signal to provide a second processed image signal (column 3, lines 44-52 of Kita).

wherein the printing apparatus includes:

- a scanner (figure 3(60) of Kita) for reading an image of a document (column 5, lines 16-30 of Kita) and outputting an image signal (column 5, lines 31-47 of Kita).
- a control unit (figure 3(50,51,52,54,56,DB,AB,CB) of Kita – main CPU) adapted for controlling said printing apparatus (column 4, lines 46-54 of Kita) and performing image processing on the image signal output from said scanner, to provide a first processed image signal, the image processing being processing that is necessary for copying (column 5, lines 33-42 of Kita).
- a first interface (figure 3(5) and column 6, lines 20-28 of Kita) for transmitting, under control of said control unit, the image signal output by said scanner to said information processing apparatus (figure 3(8) and column 5, lines 65-67 of Kita), which performs image processing on the

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- transmitted image signal to provide a second processed image signal (column 3, lines 46-48 of Kita), and for receiving the second processed image signal from the information processing apparatus (column 5, lines 65-68 of Kita – signal must be received from computer to be recorded by printer), the image processing being processing that is necessary for copying (column 5, lines 65-68 of Kita – would be unable to print if processing necessary for copying was not performed).
- a second interface (figure 3(66) of Kita) adapted for outputting the first processed image signal (column 4, lines 3-17 of Kita) and the second processed image signal (column 5, lines 67-68 of Kita) to a printing unit (as can clearly be seen in figure 3 of Kita, element 66 is the interface leading to the printing unit).
 - a copy key (figure 2(41) of Kita) for designating a start of copying (column 4, lines 31-35 of Kita).
 - said printing apparatus has a plurality of modes including a first copying mode (column 6, lines 50-55 of Kita) performed in response to a copying designation (column 6, lines 50-55 of Kita and column 19, lines 63-67 of Kita) by said information processing apparatus (figure 3 and column 4, lines 45-66 of Kita), and a second copying mode (column 6, lines 56-67 of Kita) performed in response to a copying designation by said copy key (column 4, lines 31-35 of Kita).
 - in the first copying mode for performing a first copying operation based on the second processed image signal in response to a copying designation by the user (column 6, lines 50-55 of Kita and column 19, lines 63-67 of Kita), the image signal from said scanner is transmitted to said information processing apparatus, where the image signal is processed into the second processed image signal, via said control unit and said first interface (column 19, line 68 to column 20, line 11 of Kita), and thereafter the second processed image signal is transmitted to the printing unit via said first interface, said control unit, and said second interface (column 20, lines 12-22 of Kita).
 - in the second copying mode for performing a second copying operation based on the first processed image signal (column 6, lines 56-67 of Kita), the image signal from said scanner is transmitted to said control unit where the image signal is processed to the first image signal (column 6, lines 58-61 of Kita) and the first image signal is transmitted to the printing unit via said second interface (figure 3 and column 6, lines 56-67 of Kita).

Kita does not disclose expressly that said first copying mode is completed without requiring any additional designation by the user other than the copying designation.

Matsumoto discloses printing, scanning, and other forms of image processing using a single command and without requiring any additional designation by the user other than the particular image processing designation (figure 3 and column 3, lines 49-59 of Matsumoto).

Kita and Matsumoto are combinable because they are from the same field of endeavor, namely the scanning, control and processing of digital image data in a digital image data processing, transmitting and copying environment. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to require only a single command to perform an image processing operation, as taught by Matsumoto, wherein said image processing operation is specifically the first copying operation taught by Kita. The motivation for doing so would have been to simplify the overall image data processing. Therefore, it would have been obvious to combine Matsumoto with Kita to obtain the invention as specified in claim 72.

Regarding claim 73: Kita discloses that said information processing apparatus further comprises:

- a read designation unit (figure 3(8(portion)) of Kita), adapted to designate a start for a reading of a document (column 3, lines 44-48 and column 7, lines 1-4 of Kita).
 - a print designation unit (figure 3(8(portion)) of Kita), adapted to designate a start for printing data that said information processing apparatus transmits (column 3, lines 44-48 and column 7, lines 5-7 of Kita).
 - said printing apparatus has a print mode (column 11, lines 20-22 and lines 36-40 of Kita), in which print data is transmitted from the information processing apparatus to said control unit via said first interface (figure 3 and column 4, lines 45-66 of Kita) and the printing unit prints the print data in response to a print designation designated by the print designation unit (column 11, lines 20-22 and lines 36-40 of Kita), and the image reading mode in which an image signal from the scanner is transmitted from said control unit from said information processing apparatus via said first interface in response to a read designation designated by the read designation unit (column 11, lines 36-40 of Kita).
- The information processing apparatus (figure 3(8) of Kita) contains a CPU, along with RAM and ROM which stores computer program routines. The read designation unit and print designation unit correspond to particular computer program routines stored in said ROM.

Regarding claim 74: Kita discloses that, in the first copy mode, the image signal from said scanner is transmitted to the information processing apparatus in accordance with reception of the read command transmitted from the information processing apparatus (figure 3 and column 4, lines 45-66 of

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Kita) in response to the copying designation (column 6, lines 50-55 of Kita and column 19, lines 63-67 of Kita), and thereafter the second processed image signal is transmitted to the printing unit in accordance with reception of the print command transmitted from the information processing apparatus in response to the copying designation (column 20, lines 12-22 of Kita).

Regarding claim 75: Kita discloses:

- in the read mode, the image signal from said scanner is transmitted to the information processing apparatus (figure 3 and column 4, lines 45-66 of Kita) in accordance with a read command transmitted from the information processing apparatus (column 6, line 68 to column 7, line 5 of Kita) to the printing apparatus in response to a read designation (column 10, line 66 to column 11, line 5 of Kita).
- in the print mode, the image signal transmitted from the information processing apparatus (figure 3 and column 4, lines 45-66 of Kita) to the printing apparatus is transmitted to the printing unit (column 11, lines 36-40 of Kita) in accordance with reception of a print command transmitted from the information processing apparatus to the printing apparatus in response to the print designation (column 11, lines 20-22 and lines 36-40 of Kita).
- in the first copy mode, the image signal from said scanner is transmitted to the information processing apparatus (column 19, line 68 to column 20, line 11 of Kita) in accordance with reception of the read command transmitted from the information processing apparatus (figure 3 and column 4, lines 45-66 of Kita) in response to the copying designation (column 6, lines 50-55 of Kita and column 19, lines 63-67 of Kita), and thereafter the second processed image signal is transmitted to the printer in accordance with reception of the print command transmitted from the information processing apparatus to the printing apparatus in response to the copying designation (column 20, lines 12-22 of Kita).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action

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is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

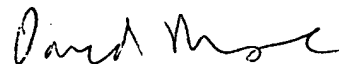
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



20 January 2007

James A. Thompson
Examiner
Technology Division 2625



DAVID MOORE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600